

THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Ping Zhu

Serial No.: 10 043,995 Art Unit: 1642

Filed: January 11, 2002 Examiner: Not Yet Assigned

For: PRODUCTION METHOD OF MICRO-REACTORS GENE CHIPS

Assistant Commissioner for Patents Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §1.56 and 37 C.F.R. §1.97, Applicant submits an Information Disclosure Statement, including three (3) pages of Form P1O-1449 and a copy of twenty-two (22) documents cited therein. We were unable to locate copies of those references indicated with an asterisk (*). We will forward copies of these shortly.

This Information Disclosure Statement is being filed under 3⁻⁷ C.F.R. 8 1.9⁻⁷(b) prior to a first Office Action on the merits. It is believed that no fee is required with this submission. However, should a fee be required, the Commissioner is hereby authorized to charge any required fees to Deposit Account No. 50-1868.

U.S. Patents

Number	Issue Date	Patentec	Class Subclass
4,656,127	04-07-1987	Mundy	435 0
4.683.195	07.28-1987	Mullis et al.	435 6
5,002,867	((3-2(s-199))	Macevicz	435 0
5.143.854	(10)=(1)[-](0)2	Pirrung et al.	430 518
5,202,231	04 13-1993	Drmanac et al	435 6

10 043,995 January 11, 2002 INFORMANON DISCLOSURE STATEMENT 5.對3.632 12-28-1993 Stockham et al. 06-18-1996 Holmes 11-17-1998 Chee et al 6.132,724 10-17-2000

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<u>N</u> umber	Publication Date	Patentee .	Country
WO 92 10588	06-25-1992	Affymax	PCT
		Technologies	
WO 93 17126	(19-(12-1993)	Public Health Research	PCT
		Institute of the City of	
		NewYork, Inc.	
1249437	04-05-2000	Univ. Beijing (CN)	CN
1252452	05-10-2000	Univ. Dongnan (CN)	CN

Publications

*CRONIN et al., Hybridization to Arrays of Oligonucleotides, Poster Presentation: Nucleic Acids In Medical Applications Conference sponsored by AACC, published in conference syllabus, Cancun, Mexico, 1993.

EICKHOFF, et al. "Tissue gene expression analysis using arrayed normalized cDNA libraries," Genome Res. 10(8):1230-1240 (2000).

LL, et al., "Analysis of fused genes resulting from 29 chromosomal aberrations in leukemia," Chin J Pedia 39(11):682-685 (2001).

*LIPSHUTZ et al., Oligonucleotide Arrays for Hybridization Analysis, Genome Sequencing and Analysis Conference V, Hilton Head, SC 1993.

LIPSHUTZ, "Likelihood DNA sequencing by hybridization," J Biomol Struct Dyn 11(3):637-653 (1993).

*LOBBAN et al., DNA Chips for Genetic Analysis, Genome Sequencing and Analysis Conference V. Hilton Head, SC, 1993.

MARAM, et al., Methods in Enzymology (Grossman, et al., eds.) vol. 65, pp. 449-559, Academic Press, Inc.: Orlando, (1980).

PASTINEN, et al. "A system for specific, high-throughput genotyping by allele-specific primer extension on microarrays," Genome Res. 10(7):1031/1042 (2000).

SAMBROOK et al., "Synthetic Oligonucleotide Probes," Molecular cloning: a laboratory manual, pp. 1145-1147, Cold Spring Harbor Laboratory Press; New York, 1989,

US.S.N.: 10-043,995 Filed January 11, 2002 INFORMATION DISCLOSURE STATEMENT

SANGER et al., "DNA sequencing with chain-terminating inhibitors," *Proc. Natl. Acad. Sci. USA* 74(12):5463-5467 (1977).

SOUTHERN et al., "Analyzing and Comparing Nucleic Acid Sequences by Hybridization to Arrays of Oligonucleotides: Evaluation Using Experimental Models," *Genomics* 13(4):1008-1017 (1992).

WATSON, "New tools. A new breed of high-tech detectives," *Science* 289(5481):850-854 (2000).

Remarks

This statement should not be interpreted as a representation that an exhaustive search has been conducted or that no better art exists. Moreover, Applicant invites the Examiner to make an independent evaluation of the cited art to determine its relevance to the subject matter of the present application. Applicant is of the opinion that his claims patentably distinguish over the art referred to herein, either alone or in combination.

Respectfully submitted,

Zhaoyang Li

Reg. No. 46,872

Dated: July 15, 2002

HOLLAND & KNIGHT LLP One Atlantic Center 1201 West Peachtree Street, N.F. Suite 2000 Atlanta, Georgia 30309-3400 404-817-8531 FAX 404-817-8588 www.hklaw.com USSN: 10.043,995 Filed: January 11, 2002 INFORMATION DISCLOSURE STATEMENT

Certificate of Mailing under 37 C.F.R. § 1.8(a)

Thereby certify that this Information Disclosure Statement, along with any paper referred to as being attached or enclosed, is being deposited with the United States Postal Service on the date shown below with sufficient postage as first-class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Date: July 15, 2002

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U.S. PATENT DOCUMENTS

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		4.656.127	Mundy	04-07-1987		
		4.683,195	Mullis et al	07-28-1987		
		5.002.867	Macevicz	03-26-1991		
		5.143.854	Pirrung et al	09-01-1992	-	
		5.202.231	Drmanac et al.	04-13-1993		
		5,273,632	Stockham et al	12-28-1993		
		5.527.681	Holmes	06-18-1996		
		5-837.832	Chee et al	11-17-1998		
		6,132,724	Blum	10-17-2000		
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FOREIGN PATENT DOCUMENTS

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	1		92 10588		Affymax Technologies	08-25-1992		
		··	93 17126		Public Health Research Institute of the City of NewYork, Inc.	09-02-1993		
		~ * .	1249437		Univ. Beljing (CN)	14-15-111		•
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STATEMENT BY APPLICANT (Use as man, sheets as necessary)	Application Number	10/043,995
1 m	Filing Date	January 11, 2002
1.45	First Named Inventor	Ping Zhu
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	Examiner Name	
Sheet 2 of 3	Attorney Docket Number	PKU 100

		OTHER ART NON PATENT LITERATURE DOCUMENTS
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		CRON N et al. Hybridization to Arrays of Oligonucleotides, Poster Presentation, Nucleic Acids In Medicai Applications Conference sponsored by AACC, published in conference syllabus, Cancun, Mexico, 1993
		EICKHOFF, et al. "Tissue gene expression analysis using arrayed normalized cDNA libraries," Genome Res. 10(8):1230-1240 (2000)
		LI, et a: "Analysis of fused genes resulting from 29 chromosomal aberrations in leukemia." <i>Chin J Pedia</i> 39(11):682-685 (2001)
		L⊇SHÚTZ et al., Oligonucleotide Arrays for Hybridization Analysis, Genome Sequencing and Analysis Conference V. Hilton Head, 3C 1993.
		LIPSHUTZ, "Likelinood DNA sequencing by hybridization." <i>J Biomol Struct Dyn</i> 11(3):637-653 (1993).
		LOBBAN et al., DNA Chips for Genetic Analysis. Genome Sequencing and Analysis Conference V. Hilton Head. SC 1993
·		MARAM, et al., Methods in Entringlogs (Grossman, et al., eds.) vol. 65, pp. 449-559. Academic Press, Inc., Orlando (1985)
		PASTINEN, et al. "A system for specific, high-throughput genotyping by allele-specific primer extension on microarrays." Ger ome Res. 10(7):1031-1042 (2000).
	•	SAMBROOK et al. "Synthetic Oligonius ertide Probes." <u>Molecular dioning</u> ila laboratory manuali pp. 1145-1147. Cold Spring Harbor Laboratory Press. New York, 1989.
		SANGER et al. (IDNA sequent india thismainsterminating inhibitors (I Pro Fi Nati Azair, S. F.) SA 74(12) 5463-5467 (1977)

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